

Tendon Achilles Lengthening (TAL)/ Gastrocnemius Recession

Why does my child need this surgery?

When a child's Achilles tendons (thick tendons that help connect the heel to the calf muscle) are overly tight because of spasticity (very tight muscle tone), they can be forced to walk on tiptoe. Pushing the foot into a flat position makes the knee bend back. The problem will get worse as they grow.

The first treatment is physical therapy and bracing. For example, a child may be fitted with a molded ankle foot orthosis (MAFO). But if the brace can't keep the foot flat, or is too uncomfortable, or if your child is too old to want to wear a brace, surgery is the next step.

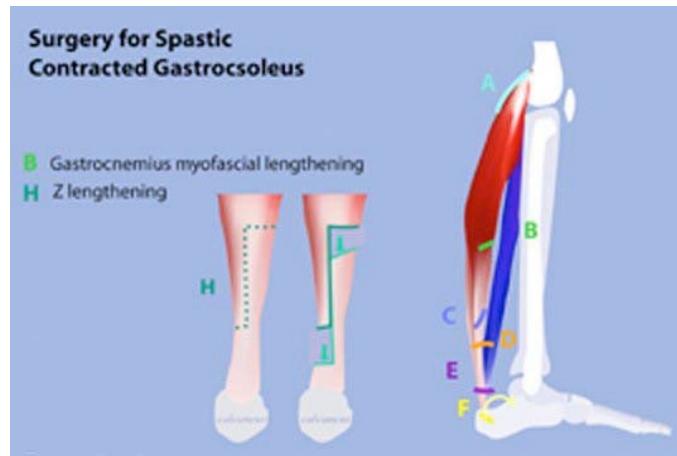
What happens during the surgery?

The Achilles tendon runs north and south behind the ankle. It attaches to the gastrocnemius and soleus muscles just above the tendon in the calf. Your child's surgeon will fix a tight Achilles and contracting foot with one of the following techniques:

- In Z-plasty lengthening, the surgeon makes an incision behind the ankle to expose the Achilles tendon, then cut a Z-shaped incision in the tendon. When the tendon is stretched, the Z-shaped incision stretches and grows longer. The surgeon then uses sutures (stitches) to sew the tendon in place. This surgical method is the most controlled way to lengthen the whole tendon and muscle. It is called an Achilles tendon lengthening.
- If the Achilles tendon contraction is less severe, the surgery can be simpler. In this case, the surgeon locates the gastrocnemius muscle and loosens its fibers, without touching the soleus muscle. This procedure is called gastrocnemius recession.

What are the incisions like?

The incisions in the skin and the tendon are vertical and about two inches long. These cuts are placed toward the inside of the leg to make them less noticeable.



What happens after surgery?

A below-the-knee cast goes on in the operating room right after surgery. A short time later, your child will be taken to the cast room to have the cast made into a walking cast.

Will my child have pain?

Yes, your child will need pain relievers and muscle relaxants at first. Our staff is trained to help make patients as comfortable as possible. Once you go home, please call the office if pain is a problem or the pain medication your child's doctor prescribed causes side effects.

Will my child be able to walk and do other activities once we go home?

Your child will need some help to stand and walk at first, especially if other muscles or bones were treated during surgery. If an Achilles tendon lengthening was the only procedure, they will probably walk in the casts within a week. Most other activities are okay as long as the casts stay dry.

Will my child be able to ride in the car?

Yes, car rides should not be a problem.

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Will my child need physical therapy?

Yes. In the beginning, physical therapy will help your child learn how to walk in casts. After the casts come off, therapy will focus on walking correctly (gait training) and stretching the muscles to keep them loose. A social worker will help you arrange therapy. You can help by asking your insurance provider in advance what your coverage is for physical therapy. Please try to do this before surgery if you can.

When will my child need to return to see the doctor or get X-rays?

Your child should come back three to four weeks after surgery to have the casts removed. No X-ray is needed. Most of the time, no brace is needed. But if a child still walks on tiptoe four weeks after the casts come off, the doctor may prescribe a brace to help break the habit.

Some children need a brace for stability. Usually, a brace like this has a hinge at the ankle that lets the child raise the foot, but keeps them from dropping the foot or walking on tiptoe.

When will my child be able to return to school and the school bus?

This varies, but it usually takes at least one to two weeks before a child is comfortable enough to ride the bus and be at school all day. Everything depends on the child's comfort at school, how far they travel on the bus and whether the school can help make things easier during recovery.

How long will it be until my child has completely recovered?

If this is the only surgical procedure, complete recovery should take three to six months.

Will this surgery ever need to be repeated?

Possibly. A child who has the surgery when they are three to five years old has a 25 to 30 percent chance of needing a second tendon lengthening between the ages of nine and 12 years old, depending on how they grow.

What are the possible complications with this surgery?

Infections can happen with any surgery. Most are minor, treatable and do not delay recovery. A more serious risk, especially for children who walk, is over-lengthening the Achilles tendon. Our surgeons use methods that minimize the chance of over-lengthening.